REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-6 remain pending, claims 1, 3, and 5 being independent. In this Reply, Applicant has amended claims 1, 3, and 5.

Prior Art Rejections

1. § 103 Rejection: *Kobori*

Claims 1, 3, and 5 stand rejected under 35 U.S.C. § 103 as being allegedly unpatentable over *Kobori et al.* (U.S. Patent 5,109,281). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Independent claim 1 is directed to an image processing method for obtaining a layout image signal representing a layout image in which a plurality of "person images" are arranged. The image processing method of claim 1 obtains the layout image signal from a plurality of original image signals, each representing an image of a person in which a face pattern of the person is embedded. The image processing method of claim 1 comprises the steps of: i) detecting face information from each of the original image signals, the face information representing a position and/or a size of the face pattern of the person in the person image represented by each original image signal, ii) performing a pattern matching process for each face pattern represented by the detected face information to calculate an amount of displacement and/or size difference thereof from a normalized value, iii) performing a face pattern normalizing process on each of the original image signals based on the detected face information and the

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calculated amount of displacement and/or size difference, a plurality of normalized image signals being obtained from the face pattern normalizing process, and iv) laying out a plurality of images, which are represented by the normalized image signals, in a predetermined layout, whereby the layout image signal representing the thus formed layout image is obtained.

In a disclosed embodiment on which independent claim 1 reads, face information detected from an original image signal is compared to a reference image, with predetermined center coordinates, a dimension v in the vertical direction, and a dimension h in the horizontal direction. A face pattern, its center coordinates, its horizontal dimension h and its vertical dimension v are detected in an image represented by the original image signal and a pattern matching unit 8 determines the amount of displacement and/or resizing necessary to normalize the face pattern in the image. A normalizing unit 3 performs a transformation of the original image to obtain a normalized image signal S1 based on the output of the pattern matching unit 8. (See p. 9, line 4 - p. 10, line 1 of the specification). Using pattern matching, the present invention is able to determine the amount of displacement and/or resizing necessary to obtain a desirable layout image without relying on a trial and error approach.

In contrast, *Kobori* discloses a video printer arrangement in which a video camera (signal source 1) is positioned relative to an object so that the object is centered relative to the camera. After the object image is taken and stored in memory, a monitor 15 is used to check the position, brightness, and contrast of the object. If the

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result of this monitoring step is unsatisfactory, the imaging conditions, including positioning of the video camera, are readjusted until a satisfactory image is generated. Col. 4, lines 56-57. Accordingly, the video printer of *Kobori* relies on trial and error for object positioning in an image, which is avoided by the pattern matching approach recited in independent claim 1.

To establish *prima facie* obviousness, all claim limitations must be taught or suggested by the prior art and the asserted modification or combination of prior art must be supported by some teaching, suggestion, or motivation in the applied reference or in knowledge generally available to one skilled in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Thus, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The prior art must suggest the desirability of the modification in order to establish a *prima facie* case of obviousness. *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1995). It can also be said that the prior art must collectively suggest or point to the claimed invention to support a finding of obviousness. *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986); *In re Ehrreich*, 590 F.2d 902, 908-09, 200 USPQ 504, 510 (CCPA 1979).

At least for the above reasons, the Examiner's reliance on *Kobori* fails to establish *prima facie* obviousness of claim 1.

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Applicant respectfully submits that independent claims 3 and 5 define over *Kobori* based on similar reasoning.

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection under 35 U.S.C. § 103 based on the teachings of *Kobori*.

2.   § 103 Rejection: *Kobori - Katayama*

Claims 2, 4, and 6 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over *Kobori* in view of *Katayama et al.* (U.S. Patent 6,424,752). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

As set forth on page 4 of the Office Action, the Examiner relies on the secondary reference, *Katayama*, as allegedly teaching incremental features of dependent claims 2, 4, and 6. Applicant submits, however, that the Examiner's reliance on *Katayama* fails to make up for the deficiencies of *Kobori* discussed above with reference to the independent claims. Therefore, the asserted combination of *Kobori* and *Katayama* (assuming these references may be combined, which Applicant does not admit) fails to establish *prima facie* obviousness of any pending claim.

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection under 35 U.S.C. § 103 based on the asserted combination of *Kobori* and *Katayama*.
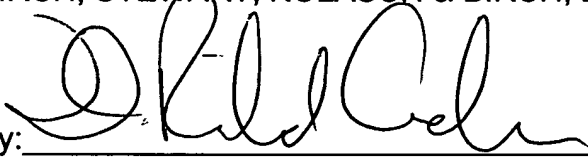
CONCLUSION

Should there be any outstanding matters which need to be resolved in the present application, we respectfully request the Examiner to contact the undersigned at (703) 205-8000, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Applicant respectfully petitions for a three (3) month extension of time pursuant to 37 C.F.R. §§ 1.17 and 1.136(a). A check in the amount of $930.00 in payment of the extension of time fee is attached.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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DRA/jdm
2091-0205P

Attachment: Version With Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

1. (Amended) An image processing method for obtaining a layout image signal representing a layout image, in which a plurality of person images are laid out, from a plurality of original image signals, each of the original image signals representing a person image, in which a face pattern of a person is embedded, the method comprising the steps of:

i) detecting face information from each of the original image signals, said face information representing a position and/or a size of the face pattern of the person in the person image represented by each original image signal,

ii) performing a pattern matching process for each face pattern represented by said detected face information to calculate an amount of displacement and/or size difference thereof from a normalized value,

[ii)] iii) performing a face pattern normalizing process on each of the original image signals [and in accordance with] based on said detected face information and said calculated amount of displacement and/or size difference, a plurality of normalized image signals being obtained from said face pattern normalizing process, and

[iii)] iv) laying out a plurality of images, which are represented by said normalized image signals, in a predetermined layout, whereby the layout image signal representing the thus formed layout image is obtained.

3. (Amended) An image processing apparatus for obtaining a layout image signal representing a layout image, in which a plurality of person images are laid out, from a plurality of original image signals, each of the original image signals representing a person image, in which a face pattern of a person is embedded, the apparatus comprising:

i) detection means for detecting face information from each of the original image signals, said face information representing a position and/or a size of the face pattern of the person in the person image represented by each original image signal,

ii) pattern matching means for performing a pattern matching process for each face pattern represented by said detected face information to calculate an amount of displacement and/or size difference thereof from a normalized value,

[ii)] iii) normalization means for performing a face pattern normalizing process on each of the original image signals [and in accordance with] based on said detected face information and said calculated amount of displacement and/or size difference, a plurality of normalized image signals being obtained from said face pattern normalizing process, and

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[iii)] iv) editing means for laying out a plurality of images, which are represented by said normalized image signals, in a predetermined layout, and obtaining the layout image signal representing the thus formed layout image.

5. (Amended) A recording medium, on which a program for causing a computer to execute an image processing method has been recorded and from which the computer is capable of reading the program, the image processing method comprising obtaining a layout image signal representing a layout image, in which a plurality of person images are laid out, from a plurality of original image signals, each of the original image signals representing a person image, in which a face pattern of a person is embedded,

wherein the program comprises the procedures of:

i) detecting face information from each of the original image signals, said face information representing a position and/or a size of the face pattern of the person in the person image represented by each original image signal,

ii) performing a pattern matching process for each face pattern represented by said detected face information to calculate an amount of displacement and/or size difference thereof from a normalized value,

[ii)] iii) performing a face pattern normalizing process on each of the original image signals [and in accordance with] based on said detected face information and said calculated amount of displacement and/or size difference, a plurality of

normalized image signals being obtained from said face pattern normalizing process, and

       [iii)] iv laying out a plurality of images, which are represented by said normalized image signals, in a predetermined layout, whereby the layout image signal representing the thus formed layout image is obtained.